AMENDMENT UNDER 37 C.F.R. § 1.116 Attorney Docket No.: Q76616

Application No.: 10/620,346

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the

application:

LISTING OF CLAIMS:

1. (previously presented): A wiring board obtained by coating a copper paste on a

ceramic green sheet and firing it to form a conductor layer and an insulating layer, the copper

paste comprising a copper powder, an organic vehicle, an SiO2 particle having an average

particle size of 40 nm or less, and a ceramic particle having an average particle size of 100 nm

or less selected from the group consisting of Al₂O₃, TiO₂, CeO₂ and mullite.

2. (previously presented): A wiring board obtained by coating a copper paste on a

ceramic green sheet and firing it to form a conductor layer and an insulating layer, the copper

paste comprising a copper powder, an organic vehicle and an SiO₂ particle in an amount of 0.1 to

5 parts by mass per 100 parts by mass of copper powder having an average particle size of 40 nm

or less.

3. (canceled).

4. (original): The wiring board according to claim 1, wherein the conductor layer

has a resistivity of $3x10^{-6} \Omega$ ·cm or less.

5. (original): The wiring board according to claim 1, wherein the insulating layer

comprises an alkali metal in amount of 0.5 mol% or less in terms of oxide.

6. (previously presented): The wiring board according to claim 1, wherein the

ceramic particle is uniformly dispersed in the conductor layer.

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7. (original): The wiring board according to claim 1, wherein a surface of the conductor layer is subjected to a plating treatment.

- 8. (previously presented): The wiring board according to claim 1, wherein a total area of inorganic material excluding material having a particle size of 2 μ m or more is 5% or less of the sectional area of the conductor layer.
- 9. (currently amended): The wiring board according to claim 1, wherein in a cross section in a thickness direction of the conductor layer, a total area of inorganic material excluding material having a particle size of 3 μ m or more is 2% or less of the sectional area of the conductor layer.
- 10. (original): The wiring board according to claim 8, wherein a surface of the conductor layer is subjected to a plating treatment.
 - 11. (canceled).
 - 12. (canceled).
 - 13. (canceled).
 - 14. (canceled).
- obtained by coating a copper paste on a ceramic green sheet and firing it to form a conductor layer and an insulating layer, the copper paste comprising a copper powder, an organic vehicle, an SiO₂ particle having an average particle size of 40 nm or less, and a ceramic particle having an average particle size of 100 nm or less selected from the group consisting of Al₂O₃, TiO₂, CeO₂ and mullite, said method comprising the steps of:

coating the copper paste on a ceramic green sheet;

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exposing the coated sheet to a wet nitrogen atmosphere at 650 to 900°C so as to remove organic components; and

firing the sheet at 850 to 1,050°C after the exposing.

- 16. (previously presented): The wiring board according to claim 1, wherein the SiO_2 particle has an average particle size of 30 nm or less.
- 17. (previously presented): The wiring board according to claim 2, wherein the SiO₂ particle has an average particle size of 30 nm or less.
- 18. (previously presented): The wiring board according to claim 1, wherein the SiO₂ particle has an average particle size of 5 to 40 nm.
- 19. (previously presented): The wiring board according to claim 2, wherein a total area of inorganic material excluding metal having a particle size of 2 μ m or more is 5% or less of the sectional area of the conductor layer.
- 20. (previously presented): The wiring board according to claim 2, wherein in a cross section in a thickness direction of the conductor layer, a total area of inorganic material excluding metal having a particle size of 3 μ m or more is 2% or less of the sectional area of the conductor layer.